2.1 Let’s practice adding and subtracting decimals…and we’re going to estimate☺

1. Rewrite each question using front-end estimation and then relative size estimation. Then calculate the exact answer.
2. Hanna spent $45.25 , $33.60 and $92.99 on new basketball shoes throughout this past year. How much did Hanna spend on her hobby?

[](http://www.google.ca/imgres?q=basketball+shoes+picture&um=1&hl=en&safe=active&sa=N&rls=com.microsoft:en-US&biw=1016&bih=553&tbm=isch&tbnid=bmS1rlWHbDbjeM:&imgrefurl=http://www.besportier.com/archives/jordan-125-team-basketball-sho.html&docid=t2eErL4SQHXMrM&w=443&h=289&ei=D196TumaLKjPiAKQqqXTDw&zoom=1&iact=rc&dur=281&page=2&tbnh=154&tbnw=211&start=15&ndsp=8&ved=1t:429,r:0,s:15&tx=89&ty=88) [](http://www.google.ca/imgres?q=basketball+shoes+picture&um=1&hl=en&safe=active&sa=N&rls=com.microsoft:en-US&biw=1016&bih=553&tbm=isch&tbnid=E7L4jjTdsC9uzM:&imgrefurl=http://www.kobebryantsstore.com/kobe-6-basketball-shoes-silvery-logo-white-purple-p-70.html&docid=8rL2pyfDVz516M&w=750&h=498&ei=D196TumaLKjPiAKQqqXTDw&zoom=1&iact=rc&dur=859&page=2&tbnh=140&tbnw=211&start=15&ndsp=8&ved=1t:429,r:1,s:15&tx=125&ty=64) [](http://www.google.ca/imgres?q=basketball+shoes+picture&um=1&hl=en&safe=active&sa=N&rls=com.microsoft:en-US&biw=1016&bih=553&tbm=isch&tbnid=uS6PNbZyVCLVSM:&imgrefurl=http://www.my-techlab.com/2009/technology/man-basketball-shoes-the-new-technology-for-a-great-game/&docid=yroYMUWC3v9I9M&w=300&h=282&ei=D196TumaLKjPiAKQqqXTDw&zoom=1&iact=rc&dur=390&page=5&tbnh=160&tbnw=170&start=39&ndsp=8&ved=1t:429,r:1,s:39&tx=38&ty=103)

45.25 + 33.60 + 92.99 =

Front end estimation:

Relative size estimation:

Exact Number:

b) Aaron sponsored a sick elephant has his charity during the summer. He spent $46.30, $13.5 and $18.20 on medical expenses and rehabilitation toys for the elephant. How much did Aaron spend on this charitable work?

Front end estimation:

Relative Size:

Exact Number:

c) Rewrite each question using front-end estimation and then relative size. Wow, Brendan has $475.12 during the new Red Deer Monopoly game (this version has coins!) he buys the bakery for $210.38 because he loves bakery smells. How much money does he have left to purchase other properties?

$475.12 – $210.38

Front End Estimation:

Relative Size Estimation:

Actual answer:

d) This summer while Ashlyn was at the Calgary Stamped, she saw a cowboy stand 6735.762 cm away from a raging bull. He carefully walked 3069.8 cm closer to the bull before it started to charge. How far away was the cowboy from the bull when it started to run at him?

Front End Estimation:

Relative Size Estimation:

Actual answer:

e) While at the Red Deer Farmers Market on the weekend, Andy’s mom bought him shaved ice for $6.30. She then purchased some potatoes for $7 and a homemade shirt for the baby for $8.69. Estimate and then calculate how much she spent altogether.

Front End Estimation:

Relative Size Estimation:

Actual answer:

f) On Monday, Amy was listening to a song “Four Minutes” but it actually was 4.315 minutes long! Then she listened to a song by Taylor Swift which wasn’t such a swift song because it took 9.1 minutes for her to sing it (now that’s opposite of swift!!!). And finally, Amy listened to a song by Hedley which was 6.04 minutes of complete bliss! What was the total amount of time Amy spent listening to music on Monday.

Front End Estimation:

Relative Size Estimation:

Actual answer:

g) T.J. played a video game where you had to shoot bananas and strawberries into a blender as fast as you can to make a smoothie. The first time he played it, it took him 0.6 hours to complete all one hundred levels (and make a super smoothie). The next time he played it, he completed the game in 0.47 hrs. How much faster did TJ finish the game the second time?

Front End Estimation:

Relative Size Estimation:

Actual answer:

h) TJ sold the game to Teyan and he finished it in 6.9 hrs. the first time (because his mom made him pause it to go to hockey practice) and 0.82 hours the second time. How much faster did TJ get at the game?

Front End Estimation:

Relative Size Estimation:

Actual answer

Make up **two** stories involving adding or subtracting decimal numbers. Be sure to figure out the answer and write it on a different page! Quietly change papers with two different students and have them try your questions. Mark their answers after.

Your Decimal Story #1:

**Student NAME**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(the name of the person trying your question)

Front End Estimation:

Relative Size Estimation:

Actual answer:

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Your Decimal Story #2:

**Student NAME**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(the name of the person trying your question)

Front End Estimation:

Relative Size Estimation:

Actual answer: